

**WHAT IS CLAIMED IS:**

1. An active matrix OLED flat-panel display, comprising:
  - a) a plurality of light emitting elements and associated control circuits;
  - b) a programmable power supply connected to the control circuits;
  - c) a sensor for sensing the light output of one or more light emitting elements to produce a feedback signal; and
  - d) a display controller responsive to the feedback signal for programming the programmable power supply to compensate for changes in the light output from the light emitting elements.
2. The display claimed in claim 1, wherein the display is a color display having light emitting elements for emitting different colors, and further comprising a separate sensor for each color emitted by the display.
3. The display claimed in claim 1, further comprising separate programmable power supplies for each color in the flat-panel display.
4. The display claimed in claim 1, wherein the programmable power supply is on a common substrate with the display.
5. The display claimed in claim 1, wherein the programmable power supply is on a separate substrate from the display.
6. The display claimed in claim 1, wherein the programmable power supply is in a common package with the display.
7. The display claimed in claim 1, wherein the programmable power supply is in a separate package from the display.

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8. The display claimed in claim 1, wherein the programmable power supply is addressable as a storage element.

9. A method of controlling an active matrix OLED flat-panel display having a plurality of light emitting elements and associated control circuits, comprising the steps of:

- a) providing a programmable power supply connected to the control circuits;
- b) sensing the light output of one or more light emitting elements to produce a feedback signal; and
- c) programming the programmable power supply in response to the feedback signal to compensate for changes in the light output from the light emitting elements.

10. The method claimed in claim 9, wherein the display is a color display having differently colored light emitting elements and further comprising the steps of providing a programmable power supply for each color, sensing the light output for each color and programming the respective power supplies in response to the respective feedback signals.

11. The method claimed in claim 9, wherein the display includes a controller having a lookup table for receiving device independent code values and producing device dependent code values and further comprising the step of calibrating the controller by changing the lookup table.

12. The method claimed in claim 9, wherein the display is a color display that includes a controller having a lookup table for receiving device independent code values and producing device dependent code values and further comprising the step of calibrating the controller by changing the lookup table to correct for the color balance of the display.

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